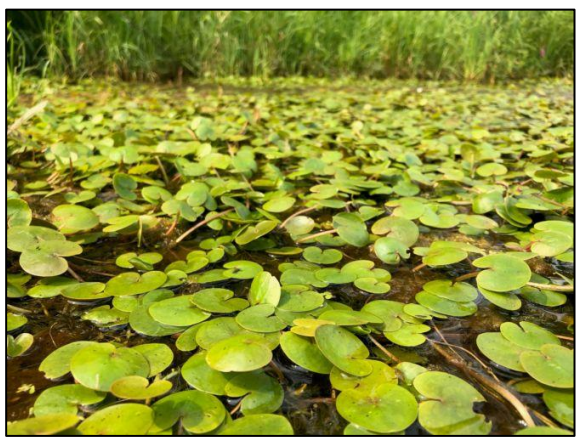
NORTHWOODS JOURNAL – SEPTEMBER 2021

A Free Publication about Enjoying and Protecting Marinette County's Outdoor Life

In This Issue:

ALERT – New Invasive Aquatic Species Found in Marinette & Oconto Counties – European Frog-bit

www.wisconsinwetlands.org/updates/new-wetland-invasive-plant-discovered-in-wisconsin-european-frog-bit/ & https://www.outdoornews.com/2021/08/09/highly-invasive-plant-discovered-for-first-time-in-wisconsin/



In July 2021, botanists discovered a population of the wetland invasive plant European frog-bit (*Hydrocharis morsus-ranae*) in Oconto County. **This is the first time this species, which is widespread along the coastal areas of lakes Erie and Huron up to the eastern Upper Peninsula, has been found in the wild in Wisconsin**. The population was discovered north of Oconto, but since then it has also been found in Marinette County in several bayside marshes in the Peshtigo Wildlife Area and Seagull Bar. A positive is that none has been found east of Harbor Road in the Peshtigo River channels or Winegar Pond.

European frog-bit grows in shallow, quiet, or slow-moving water; along the edges of lakes, rivers, and streams; and in swamps, marshes, and ditches. It is a free-floating, stoloniferous aquatic plant that can grow to form dense floating mats of interlocking plants. The leaves are leathery, measure 0.5-2.5" across, and are round to heart-shaped. The flower has three white petals and the stem has horizontal runners that produce new plants.

The dense growth form of this species can get caught in boat motors, affect fish and waterfowl movement, and decrease oxygen levels in water as plants decompose. European frog-bit is extremely difficult and costly to control, and its ability to form new plants vegetatively has allowed it to spread and proliferate quickly. The plant has been declared a noxious weed in parts of the United States.

Native look-alike plants (and how they differ from European frog-bit)

Duckweed (*Lemna* sp.) leaves are small - only 1/16" – 1/8".

White water lily (*Nymphaea odorata*) leaves have pointed lobes and its white flower has many petals.

Spatterdock (*Nuphar advena*) has a yellow flower and its leaves are large (up to 16" across).

If you see European frog-bit, take one or more photos, make note of the location, date, and time of the observation, and report to the Midwest Invasive Species Information Network.

For more information, visit the Wisconsin DNR's webpage on European frog-bit, as well as the press release issued August 9, 2021, by Wisconsin DNR on the discovery in Oconto County.

If you come across this plant, or think it's possibly this plant, report it to the Wisconsin DNR by contacting Amy Kretlow, DNR Statewide Aquatic Invasive Species Program Coordinator, at 920-838-2597 or email amy.kretlow@wisconsin.gov. You can also go online to report it at https://dnr.wisconsin.gov/topic/Invasives/report.html.

Northeast Wisconsin Land Trust Helps Landowners Protect Natural Areas Within Marinette County

www.newlt.org/

NORTHEAST WISCONSIN LAND TRUST
Preserving Our Natural Heritage

Northeast Wisconsin Land Trust is a non-profit, member-supported organization. We are northeast Wisconsin's only regional land trust, and work in 12 counties to preserve our region's lands, waters, and wildlife. Since our founding in 1996, we have preserved more than 6,000 acres of natural land, including forests, wetlands, and miles of shoreline. Our mission is to preserve lands that protect our waters, landscapes, and natural habitats for this, and future, generations.

We preserve land three ways:

- Through conservation agreements with private landowners (owners keep their land while limiting future development and determining which restrictions are placed on land use). In such conservation easements, all land is preserved forever, and agreements remain with the deed.
- Through outright purchase, creating public preserves open to the public for light recreational use (hiking, fishing, and hunting).
- Through donations of land (usually these lands are opened to the public).

Our efforts depend on member support, and on the support of like-minded foundations, corporations, and others in the communities we serve. Contributions to Northeast Wisconsin Land Trust:

- Protect water quality by preserving critical land along lakes, rivers, and streams
- Improve air quality by protecting forests and trees
- Preserve and restore wildlife habitat for critters, birds, and fish
- Provide places where people can enjoy the outdoors
- Create a lasting legacy and protect the heritage of northeast Wisconsin for future generations

We have many private, protected conservancies which you may learn about at the above website. These conservancies are agreements with landowners that protect and preserve the land to their specifications, which remain forever. In Marinette County there are nine protected properties.

The Spikehorn Creek Conservancy, acquired in 2014, protects 1,500 feet of Spikehorn Creek, a Class 1 trout stream and is a total of 190 acres.

The Northern Lake Conservancy, a protected tract of 627 acres, is a woodland and spring-fed lake at the northern reach of our 12-county territory, is an iconic example of Wisconsin's forested northland. Its protection is phase-1 of continuing work to protect the property's entire 947 acres.

The Northern Lake Conservancy

There are some publicly-accessible preserves in Northeastern Wisconsin as well, although none in Marinette County. Visit https://www.newlt.org/public-preserves for more information about these preserves and how to access them.

Our History

Northeast Wisconsin Land Trust was founded in 1996 to "preserve and restore the natural heritage of Northeast Wisconsin land and waters through partnerships in land conservancy and resource management." In 1993 the idea to found NEWLT began with a simple but important concept which emerged from the 1993 'The State of the Bay: A Watershed Perspective' which stated "We cannot clean up lower Green Bay unless we clean up Lake Winnebago. We cannot clean up Lake Winnebago unless we clean up the Fox and Wolf Rivers. We have to attack pollution at its source and we have to do it through the entire watershed." NEWLT filed for tax exempt status through the IRS and was granted approval on December 10, 1996.

In 1998, Pat Timm donated a conservation easement on 60 acres of private land, creating our first conservancy. One of our proudest achievements was adding land to our Mt. Morris Conservancy in 2009 – which provides a natural habitat for the federally endangered Karner Blue Butterfly, below.

In 2012, we were able to build a boardwalk on our Guckenburg-Sturm preserve. This was a great opportunity that increased conservation and encouraged the community to come out and enjoy nature. In 2018 we preserved our largest property to date. With the preservation of over 700 acres of forestland and an entire northern lake we reached a milestone of protecting 5,900 acres with 30 miles of shorelines on 54 conserved properties.

Get Involved in Land Conservation - support conservation efforts near you!

If you care about local lands, there's a lot you can do to support land conservation efforts in Northeast Wisconsin. To make the biggest impact in your area, donate to become a Land Trust member. Land Trust members have made it possible for us to protect more than 6,000 acres of pristine land in Northeast Wisconsin. You can also donate online to become a member. You can also make a difference by volunteering at local conservation events or doing your part to adopt conservation management practices. You can also learn more about preserving your own land.

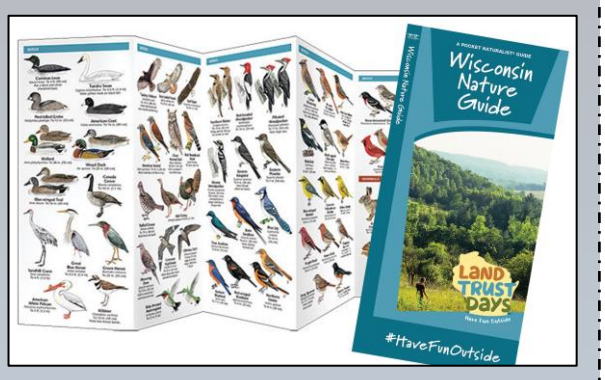
PLAN YOUR WISCONSIN LAND TRUST DAYS ADVENTURE

https://gatheringwaters.org/wisconsin-land-trust-days-3

Wisconsin Land Trust Days celebrate the protection of Wisconsin's land, water, and wildlife - the work of over 40 Wisconsin Land Trusts. Each August and September, you're invited to attend events hosted by land trusts and visit some of their protected properties.

Wisconsin's land trusts are dedicated to protecting Wisconsin's unique character and providing places for people and wildlife to flourish. Wisconsin Land Trust Days offer you the perfect opportunity to discover and explore the special natural places in your community.

Before you explore, get your Wisconsin Nature Guide. **Click here** to complete the sign-up form to receive the Wisconsin Nature Guide. We'll also make sure you receive the 2021 Wisconsin Land Trust Days Adventure Guide so you don't miss a thing during Land Trust Days this year.



Gathering Waters

Our mission is to help land trusts, landowners, and communities protect the places that make Wisconsin special. We are here to help you protect Wisconsin's land, water, wildlife, and way of life. We do this by strengthening 40 member land trusts throughout the state.

Land trusts are nonprofit organizations that permanently protect land for all of us. Each Wisconsin land trust has a unique service area, mission, and vision, based on its size and scope. No matter the size or scope of the land trust, as a member of Gathering Waters, each land trust has the strong support of their peers and the power of a statewide voice.

To make sure Wisconsin's land trusts are strong sustainable organizations forever, **we advocate for government funding** that provides millions of dollars to land trusts each year; **provide tools, resources, education opportunities, and a network of peers** for land trust staff and board members; and **increase statewide awareness** of - **and engagement** in - the opportunities and benefits land trusts bring to the communities they serve.

Get Ready for a Safe Hunting Season: Take a Hunter Safety Course

https://dnr.wisconsin.gov/Education/OutdoorSkills/safetyEducation

The Wisconsin Department of Natural Resources (DNR) is encouraging people from all walks of life to give hunting a try this year and sign up for a hunter safety course. It's never too early to think about completing your hunter education course or retaking it as a refresher.

More than 20,000 people take hunter education courses in Wisconsin each year. Anyone ***born on or after Jan. 1, 1973***, is required to have a hunter education certification to purchase a hunting license, unless hunting under the Mentored Hunting Law.

It's easy and exciting to become involved in this outdoor activity. There are three ways to get a hunter education certification:

HANDS-ON TRAINING

1. Internet Field Day:

This training allows you to complete some of your training online and then attend one day of training with a certified instructor. This class is a good fit for a person that has handled firearms or is going to be hunting with someone that has more experience to help them build upon their hunting skills. During this class there are 4-6 hours of gun handling opportunities. All age groups are welcome.

2. Traditional Class:

This training offers a more hands-on approach to working with a certified instructor over a few days. Most students and families enjoy this option because they can do it right in their community. This option provides students with opportunities to handle hunting equipment, learn about safe hunting practices, shooting and many other topics. In-person feedback from instructors at this venue also enhances student learning. All age groups are welcome.

ALL ONLINE

3. Hunter Education Online Program:

This training allows any person of any age to complete hunter education all online. The student spends multiple hours online studying and completing modules and passing a final exam to become certified.

This option is a great fit for students that have a connection/mentorship within the shooting sports to help establish and strengthen their skills and lessons learned virtually. Until Sept. 1, 2021, people of any age can complete the course.

Requirements for all safety education courses:
All Wisconsin recreational safety students are required to obtain a Wisconsin DNR Customer ID Number when registering for a safety education class and must provide that number to their instructor.

Safety Education Course objectives:
To reduce the potential for accidents, injuries and fatalities; to reduce the potential for conflict between participants, landowners and other resource users; and to promote safe, responsible and ethical use of the environment and our resources.

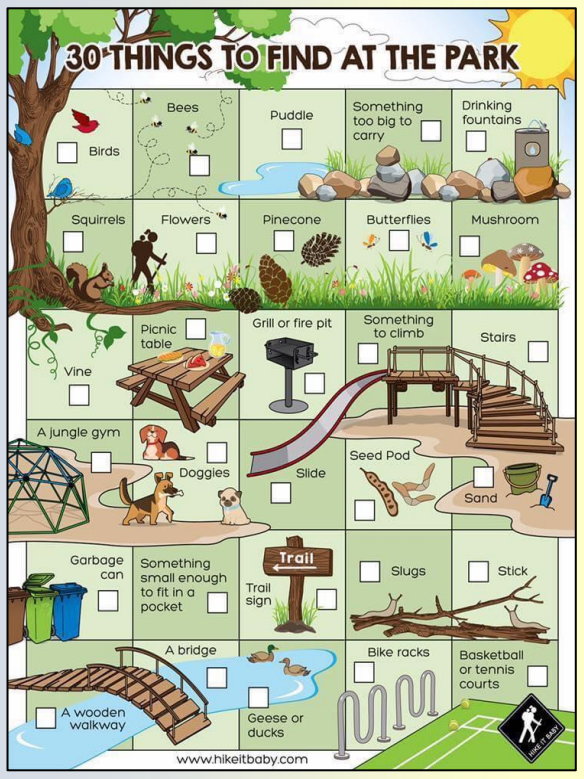
Courses are available for gun and bowhunting; boating, snowmobiling, and ATV/OHM (off-highway motorcycles).

Northwoods Journal Online

Want to read issues of the *Northwoods Journal* online? Go to www.marinettecounty.com and search for 'Northwoods Journal". We can also send you an e-mail reminder when each new issue is posted online, or you can get a copy mailed to you. Contact Anne Bartels, Information & Education Specialist at 715-732-7784 or email abartels@marinettecounty.com.

Take a Hike – Explore local Parks and Natural Areas!

https://hikeitbaby.com/blog/kids-parks-day-ideas-enjoying-park/



Looking for activities to do at the park? Check out these suggestions below or print our list of 30 things to find at the park and add some variety to your hike! For free park resources that can be incorporated into a Kids to Park hike or even in your back yard, visit the National Park Trust and check out the featured resources at the bottom!

The best part about park hikes is that they don't need to be formal. Kids can be imaginative and have fun on their own, wit h their families or with friends. Make a point to get outside and check out a park - make it a habit your family can enjoy year-round!

- **Hiking with kids is fun.** You'll remember how cool tiny bugs are, how fun it is to get a little muddy, and how beautiful birds, rocks, and butterflies can be. Seeing the world through the eyes of a child brings an inspiring, valuable perspective to any adult.

- **Walking in nature is healthy for kids and adults.** Many scholarly studies measure the health benefits of spending time in nature. Some of the research shows that just 5 minutes of walking in nature improves mood, self-esteem, and relaxation. Another benefit is improved cognitive function and memory.

- **Taking a hike with kids benefits our natural areas.** Love for the great outdoors is not a genetic trait we inherit. Conservation is a learned behavior, one that need to be fostered and encouraged. Going for hikes with children is the first step in showing the next generation the wonders of the great outdoors and why clean water and clean air matter.

Preservation of Lake Michigan Shipwrecks Is Anchored by Sanctuary Status

www.wpr.org/preservation-lake-michigan-shipwrecks-anchored-sanctuary-status

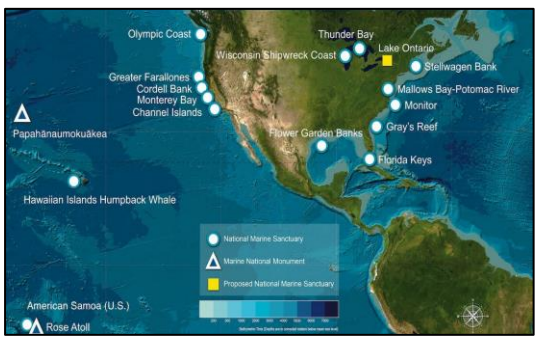
At least 36 known shipwrecks off the eastern coast of Wisconsin will get more protection since the National Oceanic and Atmospheric Administration established a sanctuary there in late June. The Wisconsin Shipwreck Coast National Marine Sanctuary is a 962-square-mile portion of Lake Michigan from southern Kewanee County to Ozaukee County that covers four famous ports - Two Rivers, Manitowoc, Sheboygan and Port Washington.

Cathy Green, an underwater archeologist and executive director of the Wisconsin Maritime Museum, said the four ports have worked with the state since 2014 to submit a nomination to NOAA. The designation was announced June 22. The sanctuary status means shipwrecked sites in the designated area can't be anchored onto directly. Instead, NOAA will install permanent anchor systems that boats can attach to, to prevent disruption to these sites.

Lake Michigan's cold, fresh water has kept the steamer *Vernon* and much of its cargo virtually intact since it's sinking in 1887 with the loss of 48 lives.

"As part of the management of these sites, NOAA will be putting out shipwreck mooring buoys to make it easier for dive boats to locate and divers to descend and ascend from the sites and then also preventing sites from inadvertent anchor damage," she said. Additionally, the site's sanctuary status will bring more opportunities for research, education and community engagement, according to NOAA.

NOAA's Office of National Marine Sanctuaries protects more than 600,000 square miles that encompasses 15 national marine sanctuaries and two marine national monuments. They all are different. Some protect wildlife populations, fragile coral reefs or combinations of resources, Green said.



"The one here in Wisconsin and Lake Michigan really focuses on those archeological resources," she said. Protecting these sites is important in the role of preserving the state's history, Green said. These vessels carried the resources that early residents of the state used to build ports and major cities.

More research into these sites is needed to help locate more shipwrecks, Green said. It's estimated that within the protected area, there are at least 59 potential shipwrecks that have yet to be discovered. Those estimates come from

Built in 1851, the well-preserved schooner *Northerner* lies in 130 feet of water.

historical research, including lightkeeper logs and insurance records. "I think one of the most exciting things about sanctuary designation is that there will be more tools, more resources to be looking for new sites," she said.

Most of the discovered shipwrecks have been found either by local divers and wreck hunters or by the state, which has stewarded these historic sites for more than 30 years. But, there's a lot of Lake Michigan out there, Green said, and so searching for these ships will continue with remote sensing techniques such as sonar and from drones searching from above.

Green said the shipwrecks in the Great Lakes are in great shape, especially compared to those in the oceans. That's due to the lake's cold and fresh water. In fact, Green said excavating these ships is not an option because they'd essentially be destroyed in the process. "It's like putting these vessels in a freezer, frozen in time," she said. "But if you brought them up from that environment, they would dry out, and they would deteriorate very quickly."

The shipwrecks protected by this designation are mostly from a period of heavy shipping on the Great Lakes, specifically from the 1830s to 1930s. Buried underwater are wooden schooners and steamers including iron- and steel-hulled ships. One of the shipwrecks under the sanctuary designation is the Niagara, a passenger side-wheel steamboat built in 1845 that sank in 1856. It caught fire off of Port Washington and sank pretty quickly about a mile from the shore, killing 60 people.

Another is the Selah Chamberlain, which was built in 1873. Bound for Escanaba, Michigan from Milwaukee, this steam barge met inclement weather and ended up colliding with another vessel. Five were killed. Without radio communication or radar back then, ships were victims of collisions, either with other ships or the bottom of the lake. Some sprung leaks and others were unstable and capsized. Bad weather was a major factor, too.

A diver swims over the two-masted schooner, Walter B. Allen, which sank in Lake Michigan in 1880.

Sanctuary website:
https://sanctuaries.noaa.gov/wisconsin/

Backyard Bird ID - How to Identify Cooper's and Sharp-shinned Hawks

www.birdsandblooms.com/birding/bird-species/birds-of-prey/hawks-identifying-coopers-sharp-shinned/

Identifying backyard hawks can be quite the challenge. So many times they are just a blur of a bird quickly making a pass through your feeding station in pursuit of a meal. If you do happen to get a decent look at the hawk, or if it decides to perch in the open long enough for you to study it, you can likely identify the species. ***Here are some key features to look for:***

Sharp-Shinned Hawk

- **Head Size -** Smaller head that barely sticks out when in flight.
- **Head Color -** Gray beginning on top of the head and continuing down through the neck feathers.
- **Legs -** Long and very thin.
- **Tail -** Tail is more square and uniform (see photo above)
- **Range -** Sharp-shinned hawks occur farther north than Cooper's hawks. They stay year-round in parts of the Northwest and the Northeast, and are seen in most of the U.S. during the nonbreeding season. This species is more commonly seen during migration or hunting at bird feeders during the winter months.

Cooper's Hawk

- **Head Size -** Proportional head that's easy to see in flight.
- **Head Color -** Dark cap with lighter coloring on the neck.
- **Legs -** Thicker with a shorter appearance.
- **Tail -** Tail feathers create a rounded look, with middle ones longer than the outer ones.
- **Range -** Cooper's hawks occur throughout the continental United States during most of the year. They are a very common sight in many backyards and have adapted very nicely to hunting for prey at bird feeders. In general, if you have bird feeders, you've probably had this species in your yard.

5 Fascinating Facts About Fall Hummingbird Migration

www.birdsandblooms.com/birding/attracting-hummingbirds/five-fascinating-facts-about-fall-hummingbird-migration/

It's that bittersweet time of year when northern folks say goodbye to the hummingbirds they've watched all summer. It's time for fall migration, and hummingbirds across the country are leaving and heading south. Some rufous hummingbirds may linger in southern Texas or Florida into the winter months, but most won't risk the possibility of cold weather and instead will move on. The exception to this are Anna's hummingbirds, which remain in coastal California year-round. Here are some cool hummingbird migration facts.

Hummingbird Migration Is Triggered by the Amount of Daylight

Some folks worry that leaving their feeders up will cause hummingbirds to remain in the area and freeze to death in the winter. This is completely false. Hummingbirds know to leave when days are shorter, and sugar water in feeders can be an important food source as the birds head south.

In fact, taking down your hummingbird feeders too soon can be a problem for birds in areas where wildflowers no longer dominate the landscape. Leave your feeders up and full for two weeks after you see your last hummingbird visitor to ensure they have the sustenance they need to make the long journey ahead.

When Do Hummingbirds Leave in Fall?

Hummingbirds typically leave in late summer and early fall. Male hummingbirds leave first, sometimes heading south as early as July. Female hummingbirds and juveniles may leave a few days or even a few weeks later. Hummingbirds do not migrate en masse; each bird undertakes the journey on its own. This allows them to space out their travels to take best advantage of available food.

Hummingbirds are too small to benefit from traveling in each other's wake like larger birds, so individual journeys work best for these creatures.

A Hummingbird's Fall Migration Journey Takes Approximately Two Weeks

This varies, of course, depending on weather and other factors. The birds are headed for Mexico and South America, with some species heading as far south as Panama. They are capable of flying at speeds up to 35 miles an hour, and could make the journey in as little as a week, but most stop to rest and all stop to feed along the way.

During the fall migration months, you should notice an increased number of visitors at your feeders during warm dry weather, but don't expect them to linger - they usually spend no more than a day in one area.

A Hummingbird's Flight Across the Gulf of Mexico Takes 18 to 24 Hours

Hummingbirds travel during the day, with the exception of those that must make the perilous Gulf crossing. Once a hummingbird leaves shore, it must continue the journey until it finds dry ground again. That means the birds must fly for at least 18 hours, and sometimes longer if the weather is bad. Folks who live along the northern Gulf Coast can help hummingbirds prepare for arduous journey by providing lots of nectar flowers and sugar-water feeders.

Hummingbirds That Encounter Cold Weather Experience Torpor

Hummingbirds migrate because they are unable to withstand freezing temperatures for extended periods of time. They have an amazing adaption to help them survive the unexpected, though. If cold weather sets in early, or a belated lingerer faces an unexpected cold spell, hummingbird bodies will essentially shut down all non-essential functions (including breathing for a short time). They drop their body temperatures by up to 50 degrees, and slow their heartbeats to almost nothing.

When warmer temperatures return, they "wake up" in about an hour or so and continue their journey. It can be a little alarming to see a hummingbird in torpor, since they often hang upside-down from a tree or even a feeder. Don't disturb hummingbirds you find exhibiting this behavior - they'll be just fine once the weather warms up!

Discover more jaw-dropping facts about hummingbirds, here and at the links below:

- https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=29582
- https://www.highcountrygardens.com/gardening/best-plants-hummingbird-migration
- https://www.audubon.org/content/how-create-hummingbird-friendly-yard

You may have seen bergamot as an ingredient in popular perfumes and cocktails or teas, but did you know that it is a native plant across Canada and the United States? Having this plant in your garden can support local pollinators such as native bees, butterflies, and the beautiful ruby-throated hummingbird.

A hummingbird clearwing moth nectaring on bergamot. This moth is diurnal - active in the daytime – unlike most other moths.

Wild Bergamot (*Monarda fistulosa*) is an herbaceous perennial that can grow up to 4 feet tall. It can tolerate a range of soil types and blooms between May and August depending on its location. The plant has ornate pink/purple flowers that have a fragrant aroma, making it attractive to a wide range of pollinators and wildlife. If you plant wild bergamot in your garden, it can be harvested for teas and essential oils!

Monarda didyma, also called **Scarlet Beebalm** or **Oswego Tea**, is a bright red related species that attracts many pollinators as well, especially hummingbirds.

For more about bergamot, beebalm, and other native pollinator plants, visit:

- https://xerces.org/blog/plants-for-pollinators-wild-bergamot
- www.wildflower.org/plants/result.php?id_plant=MODI
- https://plants.usda.gov/DocumentLibrary/plantguide/pdf/pg_mofi.pdf
- https://davesgarden.com/guides/articles/bee-balms-and-mondaras-keep-your-pollinators-happy-this-season
- https://www.gardendesign.com/perennials/pollinators.html

Do You See Me Now? Types of Camouflage in the Wild

www.nationalgeographic.org/encyclopedia/camouflage/

Camouflage, also called **cryptic coloration**, is a defense mechanism or tactic that organisms use to disguise their appearance, usually to blend in with their surroundings. Organisms use camouflage to mask their location, identity, and movement. This allows prey to avoid predators, and for predators to sneak up on prey.

Eastern Screech Owl in a tree

A species' camouflage depends on several factors. The physical characteristics of the organism are important. Animals with fur rely on different camouflage tactics than those with feathers or scales, for instance. Feathers and scales can be shed and changed fairly regularly and quickly. Fur, on the other hand, can take weeks or even months to grow in. Animals with fur are more often camouflaged by season. The arctic fox, for example, has a white coat in the winter, while its summer coat is brown.

Long-tailed weasels are white in winter and brown in summer, like arctic foxes

The behavior of a species is also important. Animals that live in groups differ from those that are solitary. The stripes on a zebra, for instance, make it stand out. However, zebras are social animals, meaning they live and migrate in herds. When clustered together, it is nearly impossible to tell one zebra from another, making it difficult for predators such as lions to stalk an individual animal.

A species' camouflage is also influenced by the behavior or characteristics of its predators. If the predator is color-blind, for example, the prey species will not need to match the color of its surroundings. Lions, the main predator of zebras, are color-blind. Zebras' black-and-white camouflage does not need to blend in to their habitat, the golden savanna of central Africa.

Camouflage Tactics

Environmental and behavioral factors cause species to employ a wide variety of camouflage tactics. Some of these tactics, such as *background matching* and *disruptive coloration*, are forms of **mimicry**. Mimicry is when one organism looks or acts like an object or another organism. Background matching is perhaps the most common camouflage tactic. In background matching, a species conceals itself by resembling its surroundings in coloration, form, or movement. In its simplest form, animals such as deer and squirrels resemble the "earth tones" of their surroundings. Fish such as flounder almost exactly match their speckled seafloor habitats.

This red fox blends with the vegetation

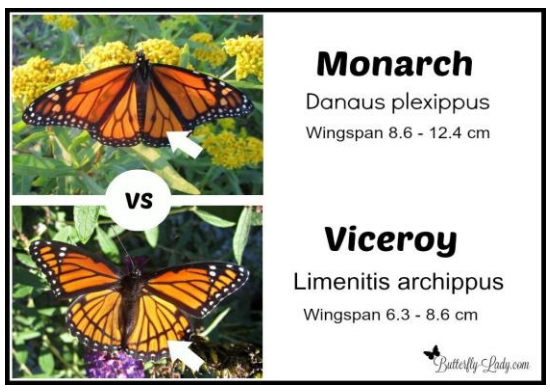
More complex forms of background matching include the camouflage of the walking stick and walking leaf. These two insects, both native to southeast Asia, look and act like their namesakes. Patterns on the edge of the walking leaf's body resemble bite marks left by caterpillars in leaves. The insect even sways from side to side as it walks, to better mimic the swaying of a leaf in the breeze.

Another camouflage tactic is disruptive coloration. In disruptive coloration, the identity and location of a species may be disguised through a coloration pattern. This form of visual disruption causes predators to misidentify what they are looking at. Many butterflies and moths have large, circular patterns on the upper part of their wings. These patterns, called *eyespots*, resemble the eyes of animals much larger than the butterfly, such as owls. Eyespots may confuse predators such as birds and misdirect them from the soft, vulnerable part of the butterfly's body. Note the large eyespot on the owl butterfly below.

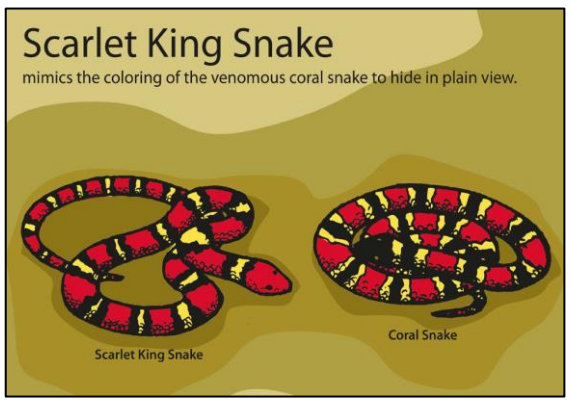
Other species use coloration tactics that highlight - rather than hide - their identity. This type of camouflage is called **warning coloration** or **aposematism**. Warning coloration makes predators aware of the organism's toxic or dangerous characteristics. Species that demonstrate warning coloration include the larva and adult stages of the monarch butterfly.

The monarch caterpillar is brightly striped with yellow, black, and white. The monarch butterfly is patterned with orange, black, and white. Monarchs eat milkweed, which is a poison to many birds. Monarchs retain the poison in their bodies. The milkweed toxin is not deadly, but the bird will vomit. The bright coloring warns predator birds that an upset stomach is probably not worth a monarch meal.

The Viceroy is a butterfly that mimics the warning colors of the monarch and is very similar in appearance, although it's a bit smaller.



Another animal that uses aposematism is the deadly coral snake (not a Great Lakes region species), whose brightly colored rings alert other species to its toxic venom. The coral snake's warning coloration is so well known in the animal kingdom that other, non-threatening species mimic it in order to camouflage their true identities. The harmless scarlet king snake has the same black, yellow, and red striped pattern as the coral snake. The scarlet king snake is camouflaged as a coral snake.



Countershading is a form of camouflage in which the top of an animal's body is darker in color, while its underside is lighter. Sharks use countershading. When seen from above, they blend in with the darker ocean water below. This makes it difficult for fishermen - and swimmers - to see them. When seen from below, they blend in with lighter surface water. This helps them hunt because prey species below may not see a shark until it's too late. Other fish, aquatic mammals, and many birds also use countershading, especially waterfowl.

Countershading also helps because it changes the way shadows are created. Sunlight illuminates the top of an animal's body, casting its belly in shadow. When an animal is all one color, it will create a uniform shadow that makes the animal's shape easier to see. In countershading, however, the animal is darker where the sun would normally illuminate it, and lighter where it would normally be in shadow. This distorts the shadow and makes it harder for predators to see the animal's true shape.

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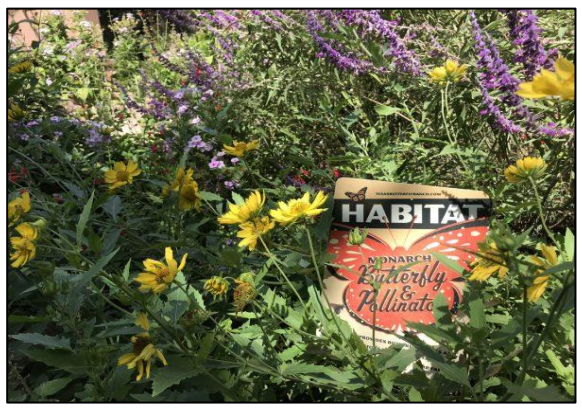
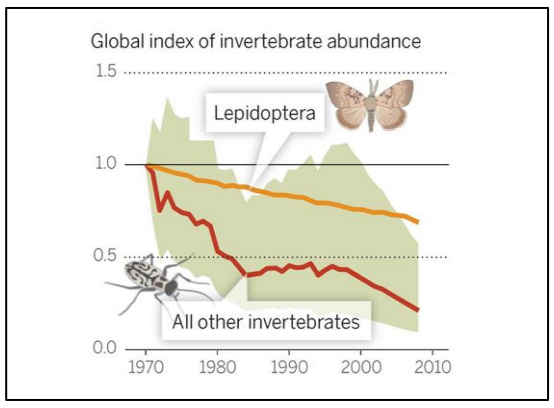
Can Our Yards Save the Planet?

http://www.mountvernongazette.com/news/2021/jul/20/can-our-yards-save-planet/



The Earth is losing one to two percent of its insects every year, reported University of Connecticut entomologist David Wagner in January, a trend some call "the insect apocalypse." NatureServe scientists estimate that about one third of all U.S. species of animals and vascular plants are at risk of extinction. A 2020 World Wildlife Fund study found that of nearly 4,400 mammals, amphibians, birds, fish and reptile populations have dropped by 68 percent since 1970.



These studies are signaling that the way we are managing or failing to manage our natural resources is having serious consequences. Experts point to habitat loss and fragmentation, monocultures, invasive species, pesticides, herbicides, insecticides, climate change, light pollution and disease as contributing factors.

In suburbia, lawns and sprawling development have replaced most native biodiversity. Lawns cover 40 to 50 million acres of land in the United States, almost equivalent to all of the country's national parks, wrote Tik Root in the July 1 Washington Post. And while the perfect green lawn may be an American icon, ecologically, it has very little habitat value.

To reverse the declines in insects, birds and other wildlife and to be better stewards of the environment, many gardeners today are turning to more natural landscaping approaches and native plants. University of Delaware entomologist Dr. Doug Tallamy offers this: "We have allowed alien plants to replace natives all over the country. Our native animals and plants cannot adapt to this gross and completely unnatural manipulation of their environment in time to negate the consequences."

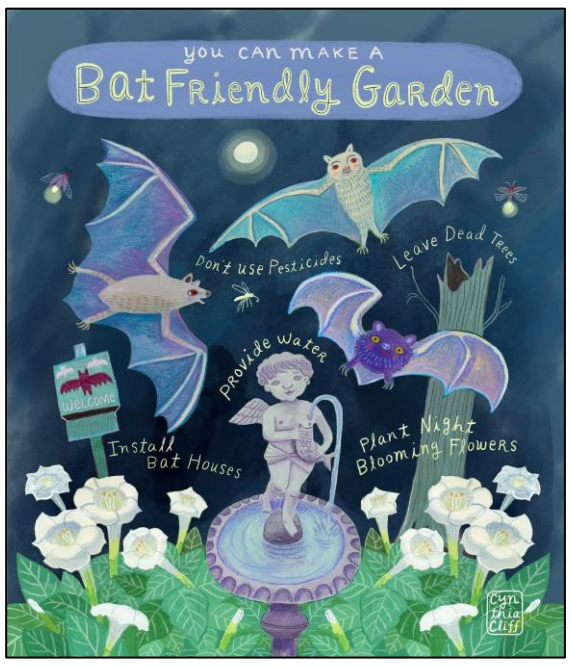
With his initiative called **"Homegrown National Park,"** Dr. Tallamy argues that our national parks are too small and spread apart to preserve species to the levels needed, that people can restore habitat and the ecological health of our communities.

Start a new HABITAT™
HOMEGROWN NATIONAL PARK™

Pollinator Gardening

Pollinators include bees, beetles, butterflies, moths, other insects, birds and bats. When a pollinator carries pollen grains from the male anther of a flower to the female stigma of flowers of the same species and fertilizes it, pollination results and the plant can produce seeds. Around 75 percent of all flowering plants depend on pollinators for fertilization, but many pollinator species are declining. "The main threat facing wild pollinators Is loss of habitats," wrote Kathy Reshetiloff for the Bay Journal.

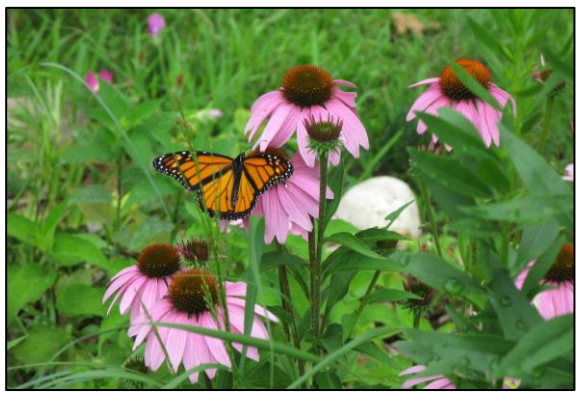
Some pollinators are generalists and can pollinate a variety of plant species, but others are highly specialized. Many pollinators evolved to emerge when their plants are flowering. If the plants are not available, the pollinators cannot survive.



Butterfly Gardening

Some people are planting native plants to support butterflies. "Selecting plants that will feed butterflies while also encouraging them to stick around for a while, laying eggs and creating a new generation of butterflies is your goal," advises the North American Butterfly Association's website. "To do this, you will need to choose plants that fall into two groups: nectar plants that will provide adult butterflies with energy and caterpillar food plants that will feed caterpillars. With careful selection from these two groups, your garden will provide for the entire life cycle of butterflies."

Some people are planting to specifically help monarch butterflies and support their migration to and from Mexico. These orange and black butterflies, weighing one-fifth the weight of a penny, are the only butterfly species to regularly undertake a two-way migration, for



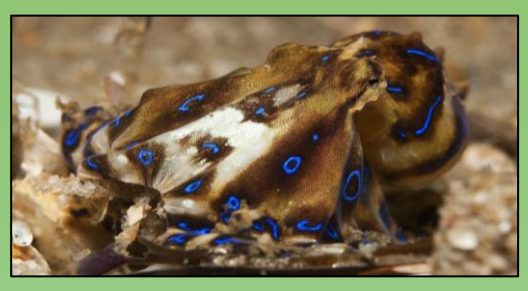
Monarch butterfly nectaring on a purple coneflower

Continued next page

Camouflage, continued

Creating Camouflage

Animal species are able to camouflage themselves through two primary mechanisms: *pigments* and *physical structures*. Some species have natural, microscopic pigments, known as *biochromes*, which absorb certain wavelengths of light and reflect others. Species with biochromes actually appear to change colors. Many species of octopus have a variety of biochromes that allow them to change the color, pattern, and opacity of their skin.



Other species have microscopic physical structures that act like prisms, reflecting and scattering light to produce a color that is different from their skin. The polar bear, for instance, has black skin. Its translucent fur reflects the sunlight and snow of its habitat, making the bear appear white.

Camouflage can change with the environment. Many animals, such as the arctic fox, change their camouflage with the seasons. Octopuses camouflage themselves in response to a threat. Other species, such as nudibranchs - brightly colored, soft-bodied ocean "slugs" - can change their skin coloration by changing their diet.

Chameleons change colors in order to communicate. When a chameleon is threatened, it does not change color to blend in to its surroundings. It changes color to warn other chameleons that there is danger nearby.

Some forms of camouflage are not based on coloration. Some species attach or attract natural materials to their bodies in order to hide from prey and predators. An example here in Wisconsin are casemaker caddisflies, insects whose aquatic larval forms make 'houses' out of sticks, leaves and rocks to hide from predators in a streambed or river.

Other animals demonstrate olfactory camouflage, hiding from prey by "covering up" their smell or masking themselves in another species' smell. The California ground squirrel, for instance, chews up and spits out rattlesnake skin, then applies the paste to its tail. The ground squirrel smells somewhat like its main predator. The rattlesnake, which senses by smell and body heat, is confused and hesitant about attacking another venomous snake.

For more about camouflage in the wild:

- ✓ https://www.nationalgeographic.com/animals/article/camouflage-explained
- ✓ https://www.canr.msu.edu/news/exploring-disguise-and-mimicry-camouflage-with-youth
- ✓ https://www.scholastic.com/teachers/articles/teaching-content/critter-camouflage/
- ✓ https://kidsactivitiesblog.com/47295/animal-camouflage/

Busy Burrowing Bees! A Majority of our Bees are Solitary Ground-Nesters

A mining bee nest example

Out of the 20,000 bee species in the world, 70% actually make their nests underground. Ground-nesting bees including mining bees, cellophane bees, sweat bees, long-horned bees, and squash bees build their nests by creating small conical piles that lead to underground tunnel systems. This is where female bees lay their eggs and where bee larvae develop into adults!

There are approximately 400 verified species of bees in Wisconsin, and likely more that have not yet been identified. These include various species of miner bees, mason bees, leafcutter bees, and sweat bees among many others. While the honeybee and most bumblebees live in large social groups with one queen, a worker caste of non-reproductive females, and (at various times in their life cycles) males, the vast majority of bees are solitary. Each solitary bee makes her own nest, and provides for her offspring by herself. While social bees will readily sting to protect their nest, solitary bees will rarely sting unless provoked.

An Unequal Cellophane Bee emerging from nest

Mining bees and cellophane bees are two of the more common species we encounter nesting in aggregations in Northern Wisconsin. These ground-nesting bees prefer burrowing in dry sandy soils where there is sparse grass. You find them on sunny, south-facing slopes that dry out and warm up quickly in early spring. Females excavate the soil, creating a main tunnel and 5-10 side chambers where they will lay their eggs. From above, the burrows look like ant hills, but the opening is larger and it is common to see a fuzzy bee face peeking out of the hole.

Ever wonder how a ground-nesting bee creates their nest? Check out the video below!
https://www.facebook.com/ThePollinatorPartnership/videos/639018350819749/

Carpenter Bee

In the late spring and early summer, homeowners often notice large, black bees hovering around the outside of their homes. These are probably Carpenter Bees searching for mates and favorable sites to construct their nests. Male carpenter bees are quite aggressive, often hovering in front of people who are around the nests. The males are harmless because they lack stingers. **Female carpenter bees can inflict a painful sting but seldom will unless they are handled or provoked.** Carpenter bees resemble bumblebees (below), but the upper surface of their abdomen is bare and shiny black. Bumblebees have a hairy abdomen with some yellow markings. Carpenter Bees can be found under eaves, decks, breezeways, etc. They drill holes in the exterior of the wood to lay eggs.

Mining Bee

Mining bees resemble the typical honeybee in shape and size. Bodies are colored dark with fine light brown or yellow hairs. They have chewing-lapping mouthparts used to manipulate and collect flower products such as nectar and pollen. The protruding 'lapping' mouthpart is shorter in mining bees than honeybees, giving them the common name of 'short-tongued' bees.

Unlike honeybees, mining bees are solitary and do not form large, socially organized nests. As their name suggests, mining bees dig single nests in the soil. In spring, adult bees emerge, mate and begin nest preparation. Bees select exposed, well-drained soils to nest in such as banks, hills and road cut-outs. Although the bees are solitary nesters, they often construct nests in large numbers next to one another at a given nesting site. Each female mines out a cylindrical hole to raise offspring. The nest consists of a vertical tunnel and side cells alongside the tunnel for hatching eggs.

Foraging activity generally lessens during the summer months and the bees become less noticeable. Mature larvae pupate and transform into adults during the late summer. Adults spend the winter inside the burrow and will emerge the following spring to start the whole cycle over. When bees nest together in large numbers, they can be quite ominous, especially during mating and foraging seasons. Mining bees can sting only once and they are not easily provoked unless you run over their nest with a lawnmower.

For more about these and other bees, visit:

- https://uwm.edu/field-station/tag/bees/
- https://hort.extension.wisc.edu/files/2014/11/Pollinators.pdf
- https://hort.extension.wisc.edu/files/2016/08/WI-BEE-IDENTIFICATION-GUIDE.pdf
- https://jccnaturenotes.wordpress.com/2020/04/16/spring-awakening-our-backyard-bees/
- https://www.wxpr.org/post/ground-nesting-bees-wisconsin#stream/0
- https://dnr.wisconsin.gov/sites/default/files/topic/EndangeredResources/bullyforbees.pdf
- https://wisconsinpollinators.com/Bee/BA_NativeBeeNesting.aspx
- https://www.pollinatorsnativeplants.com/

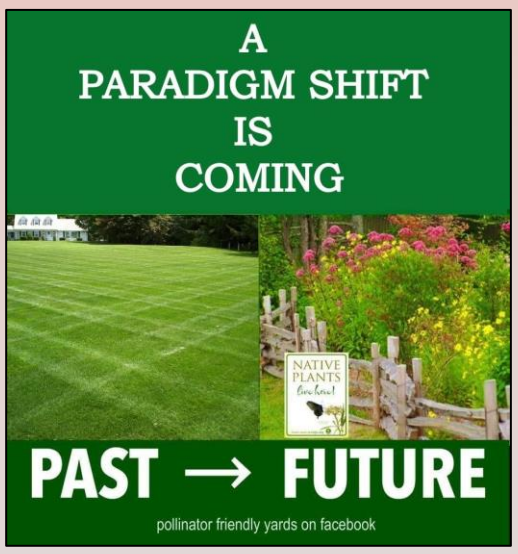
Yards, continued

some, a 3,000-mile trip over three generations. "This is one of the most extraordinary annual migrations on our planet," said monarch expert, the late Dr. Lincoln Brower of Sweet Briar College.

Most butterfly caterpillars feed on specific plant species, called their host plant. Monarch butterfly caterpillars feed exclusively on milkweed leaves. Host plants generally are the plants on which butterflies lay eggs and their caterpillars eat. Without milkweed, monarch butterflies cannot complete their life cycle.

Tallamy urges people to "re-create" nature. For species in decline, he says, "Their only hope for a sustainable future is for us to intervene to right the wrongs that we have perpetrated. In order to let nature take its course, we must first re-create nature."

A fritillary butterfly on wild bergamot



For more about creating backyard habitat, butterfly/pollinator gardening, insect declines, etc., visit –

- https://homegrownnationalpark.org/
- https://www.nwf.org/CertifiedWildlifeHabitat
- https://nababutterfly.com/basics-of-butterfly-gardening/
- https://www.xerces.org/bring-back-the-pollinators
- https://e360.yale.edu/features/insect_numbers_declining_why_it_matters

CAMPERS CORNER

Marinette County Parks

The dog days of summer continue! The sun has been out, the birds are still churping and you still have time to visit our parks. Pack up the car for a day trip and get out while you can. See below for official closing dates. But just because we are 'closed' that doesn't mean you have to stop exploring. We just don't upkeep the facility or plow for snow. Your annual sticker pass is good through December 31, 2021.

MARINETTE COUNTY CLOSING DAY:

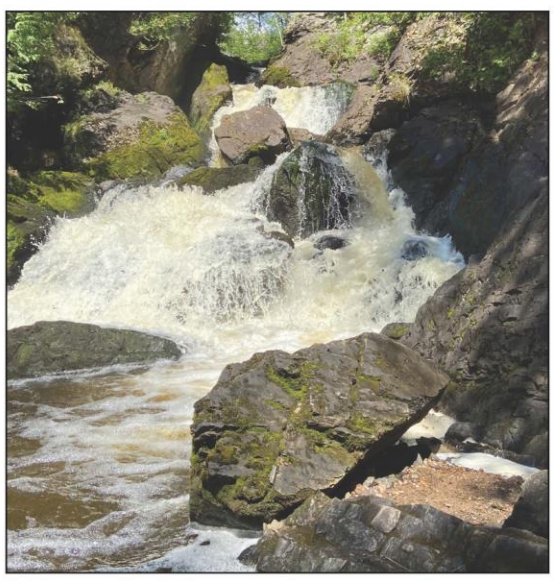
October 15..... Twin Bridge Park and Lake Noquebay Beach House.
Potable Water Towers at Morgan and Goodman Parks
November 1..... All Lodges
November 30.....All Parks and Cabins

*some parks may close earlier due to inclement weather

Lake Noquebay Park | Crivitz, WI

Twin Bridge Park & Campground | Crivitz, WI

Long Slide Falls | Niagara, WI

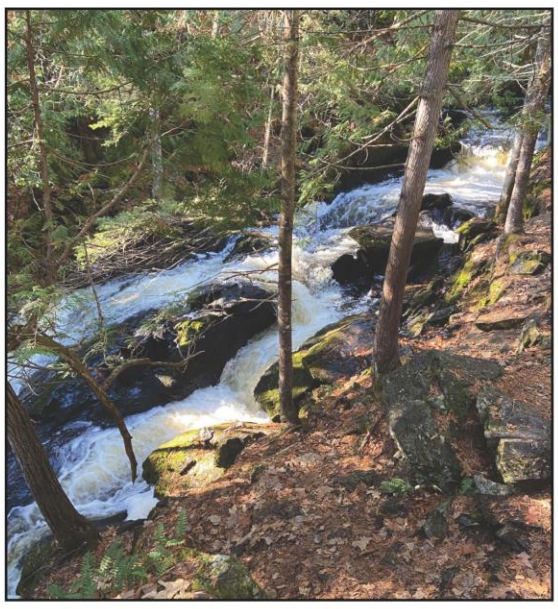


Dave's Falls | Amberg, WI

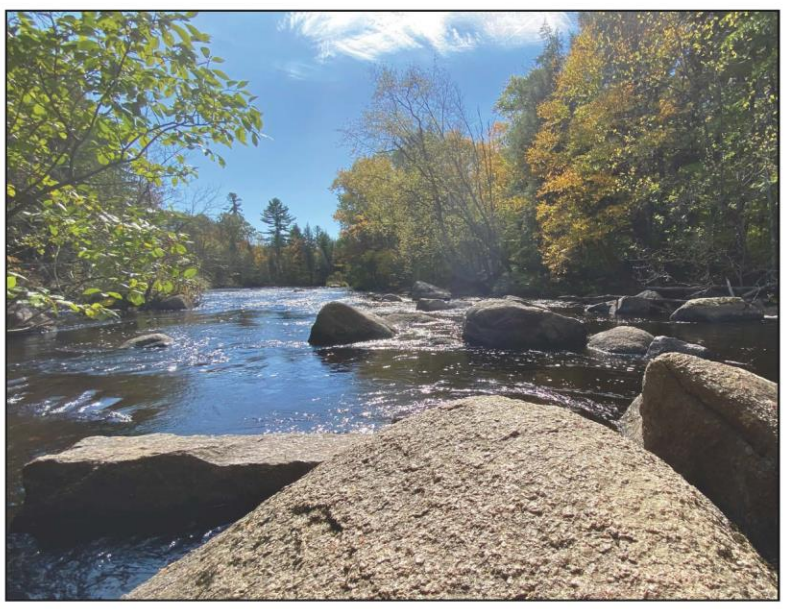
12 Foot Falls | Dunbar, WI

Thunder Mountain Overlook
Crivitz, WI

Smalley Falls | Niagara, WI



McClintock Park & Campground | Athelstane, WI



Follow us on Facebook
Marinette County Parks and Campgrounds

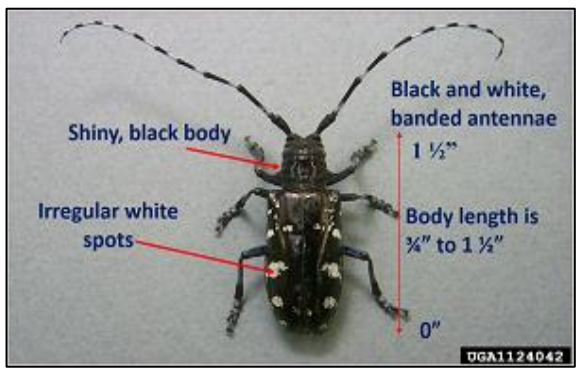
Follow us on Instagram
@marinettecountyparksandcamping

Contact the Parks office at 715-732-7531 or visit
www.marinettecounty.com/departments/parks/general-information/campgrounds-and-parks/

Check your Trees for Signs of Asian Longhorned Beetle!

https://dnr.wisconsin.gov/topic/foresthealth/asianlonghorned and
https://www.aphis.usda.gov/aphis/resources/pests-diseases/asian-longhorned-beetle

Imagine what the summer heat would feel like without the cooling shade of backyard trees. If you appreciate your trees, now is the time to show them some love! Take a few minutes to check your trees for invasive Asian longhorned beetles and the damage their larvae leave behind.



To date, the beetle has not been detected in Wisconsin or Michigan, but has been confirmed in six states, including Illinois and Ohio. Discovering early signs of infestation can prevent widespread damage to forest resources, urban landscapes and maple syrup production.

The U.S. Department of Agriculture declared August Tree Check Month because it is the best time to spot the round, drill-like holes made by the Asian longhorned beetle (see photo below).

Above – mature larva; below - emerging adult beetles chew round exit holes through bark that are about a half-inch in diameter; look for small piles of sawdust on the ground.

What to look for

- Dime-sized, perfectly round exit holes in trunks or branches.
- Shallow chew marks in the bark where the beetle lays its eggs.
- Material resembling wood shavings at the base of the tree, or where branches meet the trunk.
- Dead branches on otherwise leafy trees.
- Shiny black beetles, 3/4 to 1 1/2 inches in length, with white spots and white striped antennae.

Asian longhorned beetle is believed to have entered North America from Asia stowed away in wood packing materials. The insect was likely accidentally introduced several times before regulations were put in place requiring treatment of wood packing materials to eliminate hitchhiking insects and fungi. Under Wisconsin's invasive species rule NR 40 Wis. Admin. Code, ALB is classified as a prohibited species.

Distribution

Asian longhorned beetle (ALB) is native to China and the Koreas. **ALB populations have not been found in Wisconsin**. Infestations have been found in six states (Illinois, Massachusetts, New Jersey, New York, Ohio and South Carolina), Ontario (Canada), and several countries in Europe. Some of these infestations have been successfully eradicated (eliminated) by cutting and destroying thousands of suitable host trees, and eradication efforts continue at other infestations. A map of U.S. infestations and eradications can be seen here [PDF exit DNR].

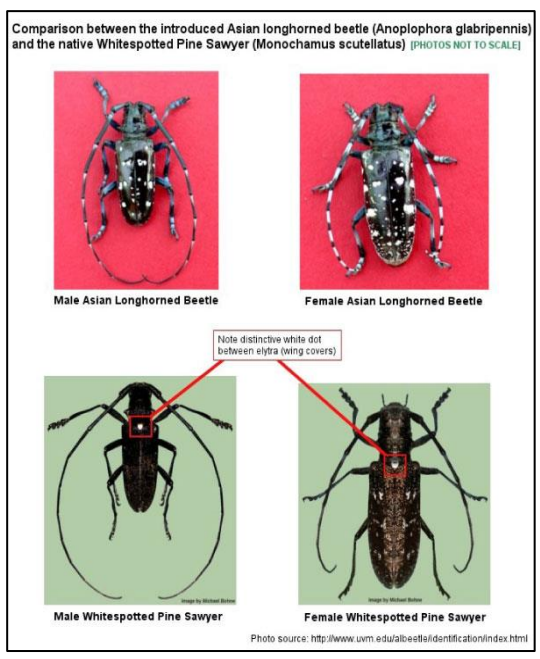
The preferred hosts are maples (Norway, sugar, silver and red) but the insect has also attacked birch, horse chestnut, poplar, willow, elm, ash and black locust. If Asian longhorned beetles become established in North America, there will be serious environmental and economic impacts, especially to maple forests and industries that use maple products.

Impacts & Prevention

Asian longhorned beetles pose a major threat to North American forests and urban areas because they can attack trees of all species regardless of individual tree health. Larval tunneling damages branches, and sufficient damage can cause tree mortality. Asian longhorned beetle can easily hide in firewood so ***do not move firewood long distances.***

Look-alikes

The white-spotted pine sawyer beetle (*Monochamus scutellatus*), a longhorned beetle native to Wisconsin, is often mistaken for Asian longhorned beetle, but there are differences [exit DNR]. Asian longhorned beetle has a thick, robust body, with a smooth shiny appearance and distinct white spots on black wing covers. The pine sawyer look-alike is slimmer in appearance, with a body that appears pitted or dusty and with less distinct and sometimes absent white spots. A distinct feature of the pine sawyer beetle is a white spot between its "shoulders" where the wing covers meet. Asian longhorned beetle does not have this feature.



If you see an Asian longhorned beetle, or a tree that appears to have ALB damage, report it. If possible, capture the beetle in a jar, take photos, record the location and report it as soon as possible online at https://www.aphis.usda.gov/aphis/resources/pests-diseases/asian-longhorned-beetle/report-it.

Stupendous Snakes!

https://www.eekwi.org/animals/reptiles/snakes &
https://www.nationalgeographic.com/animals/reptiles/facts/snakes-1?loggedin=true

A baby red-bellied snake found in a home garden – they eat invertebrates like beetle larva and slugs.

World Snake Day was back on July 16th, but it is an important day when it comes to increasing awareness about the different species of snakes all around the world. There are more than 3,000 species of snakes on the planet and they're found everywhere except in Antarctica, Iceland, Ireland, Greenland, and New Zealand. About 600 species are venomous, and only about 200 - seven percent - are able to kill or significantly wound a human.

Nonvenomous snakes, which range from harmless garter snakes to the not-so-harmless python, dispatch their victims by swallowing them alive or constricting them to death. Whether they kill by striking with venom or squeezing, nearly all snakes eat their food whole, in sometimes astoundingly large portions.

DeKay's brown snake, a common harmless species

Almost all snakes are covered in scales and as reptiles, they're cold blooded and must regulate their body temperature externally. Scales serve several purposes: They trap moisture in arid climates and reduce friction as the snake moves. There have been several species of snakes discovered that are mostly scaleless, but even those have scales on their bellies.

Did you know that there are as many as 21 kinds of snakes in Wisconsin? Only two of these snakes are venomous, the timber rattlesnake and the eastern massasauga. They are found only in specific habitats in the southwestern and central parts of the state. A few of Wisconsin's snakes are endangered including: the eastern massasauga, queensnake, western ribbonsnake and the northern ribbonsnake. Some snakes are the "protected wild animal" category which means that it is illegal to hunt or possess them.

For more about Wisconsin's snakes, visit:

- https://dnr.wi.gov/topic/WildlifeHabitat/herps.asp?mode=table&group=Snakes
- https://widnr.widen.net/s/fcmrotsuqk - WI reptile & amphibian checklist
- https://dnr.wisconsin.gov/topic/WildlifeHabitat/HerpRegulations.html - rules regarding possession of reptiles & amphibians in WI
- https://www.uwsp.edu/cnr-ap/UWEXLakes/Documents/programs/convention/2019/FR-Session7/AlyssaHoekstra_SnakesofWisconsin.pdf

6 Easy Ways to Watch Your Waste at Home

https://blog.nwf.org/2020/04/6-easy-ways-to-watch-your-waste-at-home/

Shocking news was shared about the health of the world's wildlife populations in a 2019 report released by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) - 1 million species are currently threatened with extinction.

One of the main causes for this extinction crisis is pollution, including plastic pollution in our oceans. Plastics of different sizes are being ingested by billions of creatures, and it is estimated that ingestion of plastic kills hundreds of thousands of marine birds, mammals, and fish each year.

The United States and other countries have an obligation to develop strong, smart plans and implement them quickly to put these wildlife species back on the path to recovery, and every action taken on a national or individual level to reduce waste and increase recycling is a step in the right direction to protect wildlife and their habitats. Here are six smart ways you can reduce your waste and make smart choices for wildlife at home:

#1 Be conservative …

… with your use of napkins, paper towels, and toilet paper and dispose of them properly. And use cloth napkins and towels, if possible, that can be washed with a regular load of laundry to reduce your use of disposable products and minimize your waste. *Paper towels and napkins cannot be recycled due to contamination from food waste, and other liquids, greases, etc.*

#2 When you go grocery shopping…

… choose items packaged in aluminum or cardboard rather than plastic, if possible. *Cardboard is easily recyclable and also degrades more quickly if it ends up in the landfill. According to the Aluminum Association, nearly 75 percent of all aluminum produced in the United States is still in use today, and aluminum can be recycled over and over again.*

When reusable containers are not an option, aluminum is a better choice for the environment than plastic products.

#3 Use reusable…

… cups, dishes, and utensils at home to reduce the waste that will go to the landfill, or possibly into the environment. *During the 2018 International Coastal Cleanup, 1,754,908 plastic beverage bottles and 3,668,871 straws and stirrers were collected.*

#4 Refresh your memory…

… about what can and cannot be recycled in your community. Check-in with your local landfill or waste/recycling hauler to learn about any changes. *Only around 8 percent of plastic generated in the United States is recycled.*

#5 Tie your trash bags…

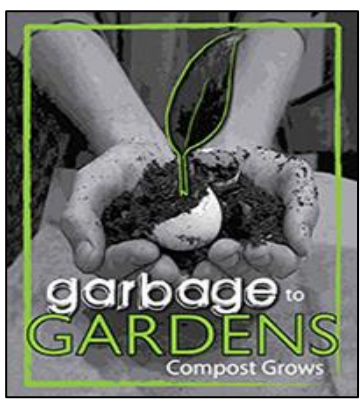
… tightly! To avoid any leakage and ensure safety for your family and sanitation workers.

#6 Spread the word!

Tell your friends and family to be conscious of their use of single-use products, specifically plastics, and recycle responsibly.

Need more ideas?

- Start composting. This is a good time to maintain or start positive home gardening habits since it will get you outside and help you reduce the number of food scraps ending up in your trashcan. Check out this story by the Natural Resources Defense Council, *Composting is way easier than you think*.



- Going through soap like it's nobody's business? Learn how to make your own. You may be surprised to learn that many of the tools and ingredients may already be in your kitchen! Check out this eco-friendly DIY resource for making soap.
- Interested in advocacy? Learn about the issues that National Wildlife Federation is working on and how you can take action for wildlife and habitat.

For more information about recycling in Wisconsin, visit:

- https://dnr.wisconsin.gov/topic/Recycling
- https://www.wm.com/us/en/recycle-right/recycling-101

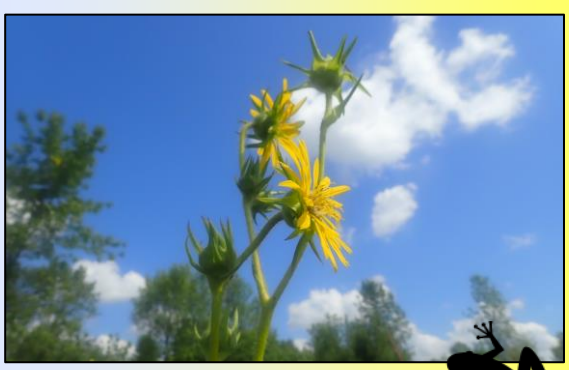
What's New at the Harmony Arboretum & Demonstration Gardens?

Recently the Northern Lights Master Gardeners placed new informational signage around the gardens! Below are some examples:

Also Land Information Department staff repainted the bathroom and cleared the stoop of weeds and obstructions.

On August 18, the Master Gardeners held an 'Ask a Master Gardener' Prairie hike program, welcoming the public to Harmony Arboretum, as well as answering questions about starting native plantings or prairie areas in a residential setting.

Above: the group tours the shortgrass prairie area; below, a compass plant in the demonstration prairie.



Monarch Habitat Takes Off in Wisconsin

https://dnr.wisconsin.gov/newsroom/release/48611

Wisconsin monarchs looking for milkweed to lay their eggs on will now find hundreds of thousands of more acres of habitat in Wisconsin thanks to voluntary efforts by organizations and individuals statewide, including representatives from the Wisconsin Department of Natural Resources (DNR).

The Wisconsin Monarch Collaborative formed in 2018 to voluntarily plant milkweed and wildflowers on a massive scale. The collaborative's efforts are essential to help reverse an 80% decline over the last 20 years in the Eastern population of monarchs that breed and migrate through Wisconsin and 15 other states.

Participants in the Wisconsin Monarch Collaborative include DNR representatives and other state and federal agencies, utilities, transportation groups, agriculture groups, university researchers, conservation groups and nature centers. "Wisconsin Monarch Collaborative partners have made a solid initial down payment on our statewide goal," said Brenna Jones, DNR Conservation Biologist and Wisconsin Monarch Collaborative Coordinator.

The group advises that adding and maintaining habitat is an important factor in reversing monarchs' decline. The group encourages planting and maintaining native milkweed and native wildflowers. Milkweeds are the only source of food monarch caterpillars will eat and adult monarchs feed on a wide variety of native wildflowers.

Collaborative members committed to voluntarily adding 120 million new stems of milkweed, along with other native wildflowers, as Wisconsin's contribution to a larger regional strategy.

The group's "Key Accomplishments 2018-2020" report released earlier this year shows monarch habitat taking flight in Wisconsin, reflecting these accomplishments:

- 105,000 reported new or enhanced acres of habitat, the bulk of it on DNR State Natural Areas
- 205,268 acres enrolled in the U.S. Department of Agriculture's Conservation Reserve Program
- 822 monarch specific conservation projects assisted by Pheasants Forever Farm Bill Biologists
- Six major demonstration sites to teach and inspire, including at two rest areas along Interstate 39/90/94 west of Madison
- 85,000 copies of Wisconsin plant list for monarchs sent directly to Wisconsin homes
- 184 Wisconsin organizations and individuals have taken the pledge to help monarchs

"Wisconsin Monarch Collaborative members expect that the pace of milkweeds and nectar plants added to Wisconsin's landscape will pick up," Jones said. "There is an unprecedented level of attention and funding now going to monarch and other pollinator habitats both nationally and in Wisconsin. Governments, nonprofits and individuals are all focusing on the task."

Andrew Wallendal, co-leader of the collaborative's agricultural working group, said many farmers are growing much-needed products and providing ecosystem services of pollinator habitats. "These growers are unsung heroes that need to be recognized," Wallendal said. Dan Meyer, a Wisconsin Farm Bureau member and dairy farmer from Kiel planning his first monarch habitat, said that pollinator habitats can be a win-win for the environment and a farmer's pocketbook.

"On our farm, we accomplish this by planting cover crops on environmentally sensitive and lower-yielding acres," Meyer said. "This is one practice we can use to help expand diversity. Oftentimes, farmers can accomplish this in a low cost, low-risk way by utilizing current cost-share funding."

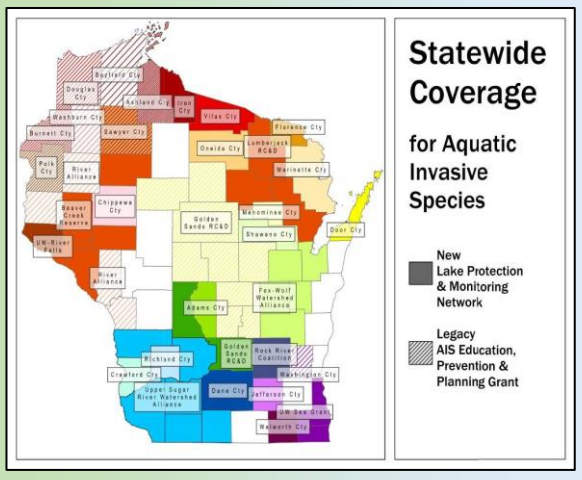
The Wisconsin Monarch Collaborative's website contains Wisconsin-specific information on how to create habitat on farms, rights-of-ways, urban areas and protected lands. The public can also report monarch habitat they have created in recent years to count toward Wisconsin's tally.

Land Information Department Staff Installs New AIS Signage

In an effort to monitor for and protect our waters from other AIS, our two seasonal staff, Austin Banaszak and McKenzie Pawlak, took on a project to inventory every boat landing in Marinette County for any aquatic invasive species present as well as make sure the AIS signage was on site and in good condition or needed replacement.

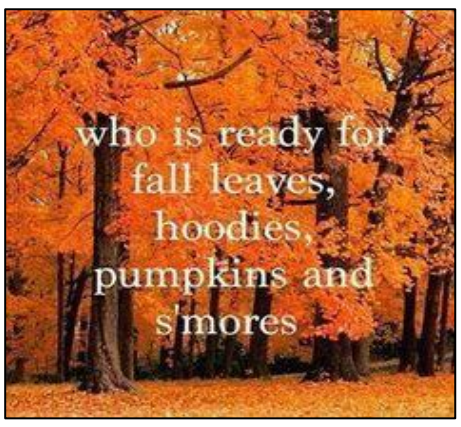
They visited over 65 boat landings and placed or replaced over 20 signs. They also installed AIS removal stations at three boat landings along the Lake Michigan shoreline including Red Arrow Park, Little River Park, and Peshtigo Harbor (above). These removal stations provide tools to assist in removal of any potential aquatic invasive species from boats, trailers and equipment after users enjoy the water.

Tools include a plastic scraper for any snails or mussels that may be adhered to a boat or trailer, a pair of grabbers for pulling any vegetation off, a brush to easily reach and scrub off the boat and trailer, and a sponge to soak up and remove water from canoes, kayaks or places that won't easily drain. These efforts were funded by a grant from the **Lake Monitoring and Protection Network** with the Wisconsin DNR (https://dnr.wisconsin.gov/newsroom/release/42566).



Fall Family Activities

https://pathways.org/10-family-activities/



Are you looking for fun family activities to do this fall? Look no further! Turn off the tv, walk away from your computer, put your phone down, and get your family active with these easy autumn activities.

Play In the Leaves

Okay, so maybe do a bit more than play. Make household chores fun for kids and adults by choosing an outdoor chore like clearing leaves from the yard, and making it a whole family project! Everyone should have a job so the whole family works together to complete the project. Someone rakes, someone else picks leaves up and places them in a bag or bin, another person loads the bins into the car. Depending on the size of your yard and family, maybe there's someone using a leaf blower to round the leaves up. Make it interesting and divide into two teams and race each other. Don't forget to jump in the leaf pile!

Go to a Game

Does one of the members of your family play on a sports team? Next time there's a little league game, bring the whole family! Most public fields have playgrounds nearby and grass where kids can run around and roughhouse. Bring a ball or jump rope for kids to play with as they watch the game.

Take a Hike

Go on a family hike and take advantage of the fall foliage. The higher you hike, the better the view!

Family Fun Run

Sign up for a road race as a family. A 5k is a surprisingly manageable distance for middle schoolers. Even if kids are too young to run, they'll love attending and cheering on their parents.

Garden With Your Kids

Plant bulbs as a family, and you can all enjoy their beauty in the spring time.

Play a Pick-Up Game

Fall is football and soccer season. Play a pickup game of basketball in the driveway or at a local park. If your family is small, invite the neighbors to join you.

Fall Scavenger Hunt

Have an autumn themed scavenger hunt. Create a list of things you can find outside in the fall like pinecones, yellow leaves, acorns, and crabapples, and race to see who can find them all first. If this is too easy, make riddles for each item so participants have to figure out what the item is before they can begin to search for it.

Visit a Farm

Take the family to your local farm and enjoy apple and pumpkin picking, hayrides, and corn mazes. If there are no farms in your area, the local farm stand, or the farmer's market can offer a similar experience.

Catch a College Game

Fall is college football season. See if there's any smaller colleges in your area that have teams. Division II and III teams often have inexpensive tickets, but still have bands and cheerleaders and all the pageantry of larger college games. Make it a day trip, and tour campus in the morning! Most schools have free tours where they share historical info on the school's founding.

For more fall family activity ideas, visit:

- https://www.womansday.com/life/g2618/fall-activities-for-families/
- https://www.goodhousekeeping.com/life/g4561/fall-activities/

Terrific Toads!

https://www.facebook.com/Marinette-County-Land-Information-Department-1707032496207222/

Did you know that the American toad (*Anaxyrus americanus*) can eat up to 100 bugs a day? Toads have no teeth, but they do have long, sticky tongues that are used for catching bugs at a lightning-fast speed. During the day, toads like to hide in cool, damp places. They can usually be found under leaves, rotting logs, or large stones. Once the heat of the day passes, the toads wake up and come out for a snack.

Their diet consists of insects and other invertebrates like worms and slugs. Toads and other amphibians (frogs, salamanders) have *permeable* skin. This means their thin skin can absorb water and oxygen. If a frog is hibernating at the bottom of a pond, it can absorb oxygen from underneath the water. Unfortunately, this also means that amphibians are more likely to be damaged by chemicals and pollution.

Each species of toad has a unique call. Males use their call to attract females for mating or to keep other males away from their territory. After toad eggs are fertilized, most hatch into tadpoles before becoming fully grown adults. Instead of legs, tadpoles have tails for swimming and gills to breathe underwater. As time passes, the tail becomes smaller and smaller until it eventually disappears. At the same time, the tadpole grows legs and loses its gills.

Once this metamorphosis stage is complete, the adult toad is ready to live a terrestrial lifestyle. Not all toads (or frogs) have a tadpole stage. However, all amphibians require an unpolluted source of water to reproduce. The common toad lives up to 40 years, but most toad species live about 5 to 10 years.

https://dnr.wi.gov/topic/WildlifeHabitat/Herps.asp?mode=detail&spec=AAABB01020

Pollinator Invitation Gardens ("P.I.G") Project Update

The Pollinator Invitation Gardens ("P.I.G.") project from last summer is continuing to show success in the over 30 sites that participated. A few new gardens were installed this summer, including at the YMCA (first photo below) in Menominee and Inferno Fitness in Marinette (second photo below).

At a condo complex in Peshtigo, plants like Turtlehead (below) were added near the Peshtigo River shoreline to help with erosion and to improve habitat.

The pollinator garden at the Peshtigo Middle/High School is also looking good – it was installed at the end of April this year.

Below is the PIG garden at the Coleman Elementary School's nature area. The PIG project will resume in some form in 2022 with a focus on businesses, parks, and other facilities.

Open House at Harmony Gardens & 'Ask a Master Gardener'

The Harmony Arboretum Demonstration Gardens are a place where all Marinette County residents and visitors can enjoy plants and local fauna, as well as learn about horticultural practices they may be able to use in their own landscapes and gardens. **Thursday evening, September 2nd, from 6:30 p.m. until 8 p.m**., an open house event is being conducted at the demonstration gardens to showcase the opportunities found at Harmony Arboretum, as well as the local Master Gardener Volunteer program. The gardens are located 7 miles west of Marinette and one-half mile south of Hwy. 64 on Marinette Cty. Hwy. E (N3890 Cty. Hwy. E; Peshtigo, WI 54157).

Ask a Master Gardener Program – Woodland Gardens

Do you want the serenity of your woods and colorful flowers? Master Gardener, Mary Marquis will give a 60-minute presentation on Woodland Gardens. It will be held **Wednesday, September 15 at 2:00 pm at the Wausaukee Village Hall**, located at 428 Harrison Ave, Wausaukee, WI 54177. The Wausaukee Village Hall is located one block east of Hwy 141; turn at Sal's Foods. This presentation will encompass an analysis of natural shade areas to understand growing conditions and appropriate plant choices. Introduction of plants and design elements that aid in creating relaxing environments to be enjoyed throughout the year. Techniques for creating color contrasts for every season. **An open discussion will follow the presentation. Master Gardeners will be available to answer your gardening questions.**

UW-Green Bay Lifelong Learning Institute Utilizes T.O.A.D. Programs

Marinette County Land Information Department's environmental education programs have a new partner in the UWGB Lifelong Learning Institute at the Marinette Campus. The program offers a wide variety of non-credit classes and other personal enrichment activities to its 1000+ members, all of whom enjoy learning for its own sake. There are no tests, no papers, no grades, no academic or age prerequisites. All classes are taught by unpaid volunteer presenters and local partners. The program is sponsored by UW-Green Bay's Division of Continuing Education and Community Engagement. Other LLI program locations include Green Bay, Sheboygan and Manitowoc.

On Friday 8/27, participants learned about pollinators and native plant gardening with Anne Bartels of the Land Information Department, Linda Warren, local Master Gardener, and Adrian Konell, both members of Wild Ones (below).

Upcoming programs include tree identification, a tour of the Harmony Arboretum & Demonstration Gardens, and a wildlife tracks program.

For more information or to register for LLI programs, visit https://www.uwgb.edu/lifelong-learning-institute/ or call 920-465-2356. You can also email lli@uwgb.edu or visit them on Facebook at www.fb.com/uwgb.lli.

Hands-on Nature Table at the Crivitz Flea Market & 'Summer Camp at Home' Activity Kits

The Land Information Department's Information & Education Specialist Anne Bartels attended the Crivitz Farmer's & Flea Market in August to showcase the 'Hands-on Nature Table'. It's a collection of some of the items used in environmental education programs, like pelts, insect specimens, antlers, turtle shells, display mounts, and wildlife skulls. Also available for the public are brochures and other handouts about wildlife, water quality, and local nature trail maps. She will be at the Sept. 2 flea market as well, the last of the season. She shared the space with County Tourism & Parks staff, who have been at every market throughout the summer.

Also this summer the department put together 'summer camp at home' kits for middle schoolers (6-8th grades). The kits, in a canvas knapsack that kids can decorate themselves, include nature exploration tools like a magnifyer, a bug jar, ID guides, a small aquatic net, insect stencils, and a folder of activities. Below is a photo of Cora Parchim using her magnifier and ID guide in her backyard to identify insects.

There are some remaining kits left, and they will be available at the September 2nd Crivitz Farmer & Flea Market. The kits are free and will be available on a first-come, first-served basis. Stop by for a visit to the 'hands-on nature table' and learn a few things about nature! ☺